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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/526,181

03/01/2005

Christopher Busch

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04/30/2008

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

DINH, TAN X

ART UNIT

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2627

MAIL DATE

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04/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/526,181	Applicant(s) BUSCH ET AL.	
	Examiner TAN X. DINH	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

1) This application is a 371 of **PCT/IB03/03405**, filed on **8/04/2003**.

Receipt is acknowledged of papers submitted under **35 U.S.C. 119(a)-(d)** or (f). The certified copy of the priority documents have been received in this **National Stage Application** from the International Bureau (PCT Rule 17.2(a)).

The foreign document identifies as:

EPO 02078676.0, filed on **9/06/2002**.

2) The amendment/preliminary amendment filed **3/01/2005** is acknowledged.

3) The **I.D.S** filed **11/10/2005** has been considered by the Examiner. However, the Japan and/or foreign document(s), if they have not been written in English, are considered to the extent that could be understood from the English Abstract and the drawings.

Form **PTO-1449** or **PTO/SB/08** is(are) attached herein.

4) The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested:

**OPTICAL RECORDING MEDIUM HAVING MULTIPLE RECORDING LAYERS
FORMED BY THERMOCHROMIC MATERIAL.**

5) This application does not contain an abstract of the

disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required in next communication.

6) Claims *1-18* are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase “ and/or ” (claims 1,8 and 9) render(s) the claim(s) indefinite since it was not clear what applicant intended to cover by the recitation “ and/or ”. The resulting claim(s), therefore, do not clearly set forth the metes and bounds of the patent protection desired.

The phrase “ said thermochromic material further comprises a polar host material ” (claim 12) is unclear and cannot be understood. Where is this “ polar host material ” come from ?

Claim(s) *2-8* incorporate the indefiniteness of claim(s) 1 by virtue of their dependency thereon.

7) Claims *10,12,13,14 and 15* are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time

the application was filed, had possession of the claimed invention.

The specification fails to provide the detail description for claims 10,12,13,14 and 15, without these teachings, anyone within the level of skill in the art cannot practicing the invention.

8) The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ 2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ 2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective **January 1, 1994**, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with **37 CFR 3.73(b)**.

9) Claims **1,2,5-7,12-14,17 and 18** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims **1-9** of copending Application No. **10/521,851**. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claims **1,2,5-7,12-14,17 and 18** of the instant application are anticipated by claims **1-9** of copending Application No. **10/521,851** in that claims **1-9** of copending Application No. **10/521,851** contains all the limitation of claims **1,2,5-7,12-14,17 and 18** of instant application. Therefore, claims **1,2,5-7,12-14,17 and 18** of instant application is not patently distinct from the earlier copending Application claim(s) and as such is unpatentable for obvious-type double patenting.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

11) (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12) Claims *1,2,5,11 and 16-18*, as understood by the meaning of 112, 2nd above, are rejected under 35 U.S.C. 102(b) as being anticipated by YOKOGAWA et al (5,608,715).

YOKOGAWA et al discloses a multi-stack optical information carrier for recording information by means of an optical beam as claimed in claim 1, comprising:

a substrate layer (Fig.1, substrate 11);

at least two recording stacks each comprising a recording layer (Fig.1, recording layers 12 and 15);

at least one spacer layer separating the at least two recording stacks (Fig.1, recording layers 12 and 15);

a cover layer (Fig.1, spacer layer 14);

characterized in that the recording layers include a thermochromic material having temperature-dependent optical characteristics for selectively improving the sensitivity of the addressed recording layer during recording and/or read-out (column 15, lines 45-57).

As to claims 2 and 5, YOKOGAWA et al shows thermochromic material has a temperature-dependent reflection/absorption characteristic (column 15, lines 45-57).

As to claims 11 and 16, YOKOGAWA et al shows thermochromic material essentially comprises pH sensitive dye molecules and color developers (column 11, lines 24-47).

As to claim 17, YOKOGAWA et al shows recording layer includes phase-change material or write-once (column 15, lines 25-27).

As to claim 18, YOKOGAWA et al shows method for recording information data on multiple recording layers using two optical beams of wavelengths (Fig.13, λ_1 , λ_2 and λ_3).

13) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14) This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C.103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the

applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

15) Claims 3,4,6-9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over YOKOGAWA et al (5,608,715).

YOKOGAWA et al discloses all the subject matter as claimed in claim 3, *except to specifically show* that the refractive index of recording layers are the same as substrate and space layer. However, in column 5, lines 15-25, YOKOGAWA et al suggests that recording layers, substrate and space layer could have the same refractive index in order to avoid out-of-focus and minimize the reflections at the interfaces. Thus, to have the same refractive index for recording layers, substrate and space layer in YOKOGAWA et al's optical disc as claimed is deem obvious to someone within the level of skill in the art.

As to claim 4, the feature of having two thermochromic materials in recording layer for limiting degrade during recording process are found to be within the level of skill in optical recording art.

As to claims 6 and 7, YOKOGAWA et al suggests to use recording layer includes fluorescent material (column 11, lines 24-47. In this case, fluorescent material is dye).

As to claims 8,9 and 12, the features of using thermochromic and/or fluorescent material in solid, semi-solid organic nature,

polymeric nature, liquid phase, polar host material, etc., in optical disc are found to be within the level of optical recording art.

16) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant is reminded that in amending in response to a rejection of claims (if the rejection involves with any applicable arts), the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objection made. Applicant must also show how the amendments avoid such references and objections. See 37 CFR § 1.111(c).

Form **PTO-892** is attached herein.

17) Any inquiry concerning this communication or earlier communications from the examiner should be directed to **TAN Xuan DINH** whose telephone number is **571-272-7586**. The examiner can normally be reached on **MONDAY-FRIDAY** from **8:30AM** to **5:30PM**.

The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the **Patent Application Information Retrieval (PAIR)** system. Status information for published applications may be obtained from either **Private PAIR** or **Public PAIR**. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/TAN Xuan DINH/
Primary Examiner, Art Unit 2627
April 26, 2008